

IN THE CLAIMS

1 23. A data format for representing an original image block having a pixel color set,
2 comprising:

3 a codeword portion for storing at least two codewords;

4 a bitmap portion for storing a set of indices; and

5 wherein said codewords define at least three colors that approximate the pixel
6 color set, and said indices map the pixel color set to at least one of said at least three
7 colors.

1 24. The data format of Claim 23, wherein said set of indices includes a predefined
2 index.

1 25. The data format of Claim 24, wherein said predefined index is for mapping a
2 transparency identifier associated with the original image block.

1 26. The data format of Claim 24, wherein said predefined index is for mapping an
2 alpha value associated with the original image block.

1 27. The data format of Claim 24, wherein said predefined index is for mapping a color
2 key value associated with the original image block.

1 28. The data format of Claim 23, wherein said codeword portion includes a first portion
2 for storing a first codeword and a second portion for storing a second codeword; and
3 wherein said first codeword and said second codeword are used to indicate a block
4 type for the original image block.

1 29. The data format of Claim 23, wherein said codeword portion includes a first portion
2 for storing a first codeword and a second portion for storing a second codeword; and

3 wherein said at least three colors includes at least two computed colors if said first
4 codeword is greater than said second codeword.

1 30. The data format of Claim 23, wherein said codeword portion includes a first portion
2 for storing a first codeword and a second portion for storing a second codeword; and
3 wherein said at least three colors includes at least one computed color and said set of
4 indices includes a predefined index if said first codeword is less than said second
5 codeword.

1 31. The data format of Claim 23, wherein said at least three colors are computed using a
2 geometric element fitted to said pixel color set so that said geometric element has a
3 minimal moment of inertia.

1 32. The data format of Claim 23, wherein said at least three colors includes one of said
2 at least two codewords.

1 33. A data format for representing an original image block having a pixel color set,
2 comprising:

3 a codeword portion for storing at least one codeword;
4 a bitmap portion for storing a set of indices, said set of indices includes an
5 available index for representing a transparency identifier; and
6 wherein said codeword defines a set of colors that approximate the pixel color
7 set, and said indices map the pixel color set to at least one color in said set of colors.

1 34. The data format of Claim 33, wherein said set of colors includes said at least one
2 codeword and a computed color.

1 35. The data format of Claim 33, wherein said set of colors includes at least three colors.

1 36. A data format for representing an original image block having a pixel color set,
2 comprising:
3 a codeword portion for storing at least one codeword;
4 a bitmap portion for storing a set of indices;
5 wherein said at least one codeword defines a set of colors that approximate the
6 pixel color set, and said indices map the pixel color set to at least one color in said set of
7 colors; and

8 wherein said set of colors are computed using a geometric element fitted to said
9 pixel color set so that said geometric element has a minimal moment of inertia.

1 37. An encoded image data format for representing an original image partitioned into
2 at least two image blocks, said image blocks each having a corresponding pixel color
3 set, the data format comprising:

4 at least two encoded image block portions, one of said encoded image block
5 portions having a codeword portion for storing at least two codewords, and a bitmap
6 portion for storing a set of indices; and

7 wherein said at least two codewords define at least three colors that approximate
8 the pixel color set of one of the original image blocks, and said indices map the pixel
9 color set to at least one of said at least three colors.

14
1 38. (amended) The data format of Claim 37, further including a header portion.

1 39. The data format of Claim 37, wherein said set of indices includes a predefined
2 index.

1 40. The data format of Claim 39, wherein said predefined index is for mapping a
2 transparency identifier associated with the original image block.

1 41. The data format of Claim 39, wherein said predefined index is for mapping an
2 alpha value associated with the original image block.

1 42. The data format of Claim 39, wherein said predefined index is for mapping a color
2 key value associated with the original image block.

1 43. The data format of Claim 37, wherein said set of colors are computed using a
2 geometric element fitted to said pixel color set so that said geometric element has a
3 minimal moment of inertia.

1 44. The data format of Claim 37, wherein said at least three colors includes one of said
2 at least two codewords.

1 45. An encoded image data format for representing an original image partitioned into
2 at least a first image block having a first pixel color set and a second image block having
3 a second pixel color set, the data format comprising:

4 a first encoded image block having a first portion for storing a first codeword, a
5 second codeword, and a first bitmap portion for storing a first set of indices;

6 a second encoded image block having a second portion for storing a third
7 codeword, a fourth codeword, and a second bitmap portion for storing a second set of
8 indices;

9 wherein said first and second codewords define a first set of colors that
10 approximate the first pixel color set, and said first set of indices map the first set of
11 colors to the first pixel color set; and

12 wherein said third and fourth codewords define a second set of colors that
13 approximate the second pixel color set, and said second set of indices map the second
14 set of colors to the second pixel color set.

1 46. The encoded image data format of Claim 45, wherein said first set of colors includes
2 at least three colors.

1 47. The data format of Claim 45, wherein said first set of colors includes at least said
2 first codeword.

1 48. The data format of Claim 45, wherein said first set of colors includes said second
2 codeword.

1 49. The data format of Claim 45, wherein said second set of colors includes at least
2 three colors.

1 50. The data format of Claim 45, wherein said second set of colors includes said third
2 codeword.

1 51. The data format of Claim 45, wherein said second set of colors includes said fourth
2 codeword.